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"ASBESTOS"

FOUNDED IN JULY 1919 AND PUBLISHED
CONTINUOUSLY SINCE THAT DATE

A. S. ROSSITER, EDITOR

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16th FLOOR INQUIRER BUILDING
PHILADELPHIA, PENNSYLVANIA

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THE UNION OF SOUTH AFRICA--

Its Asbestos Fields and Types of Asbestos Found

Editor's Note: Thru the courtesy of the Commercial Attache, of the Union of South Africa, at Washington, D. C., we have received a copy of a book compiled in the office of the Geological Survey, Pretoria, South Africa, "The Mineral Resources of the Union of South Africa."

Fourteen pages of this book are devoted to the chapter on Asbestos, and the description of the Asbestos Fields in South Africa and the types of Asbestos found there, is such that we believe our readers will be glad to have this included in "ASBESTOS". It is much too long to publish in one issue but will appear in serial form in the next three or four issues.

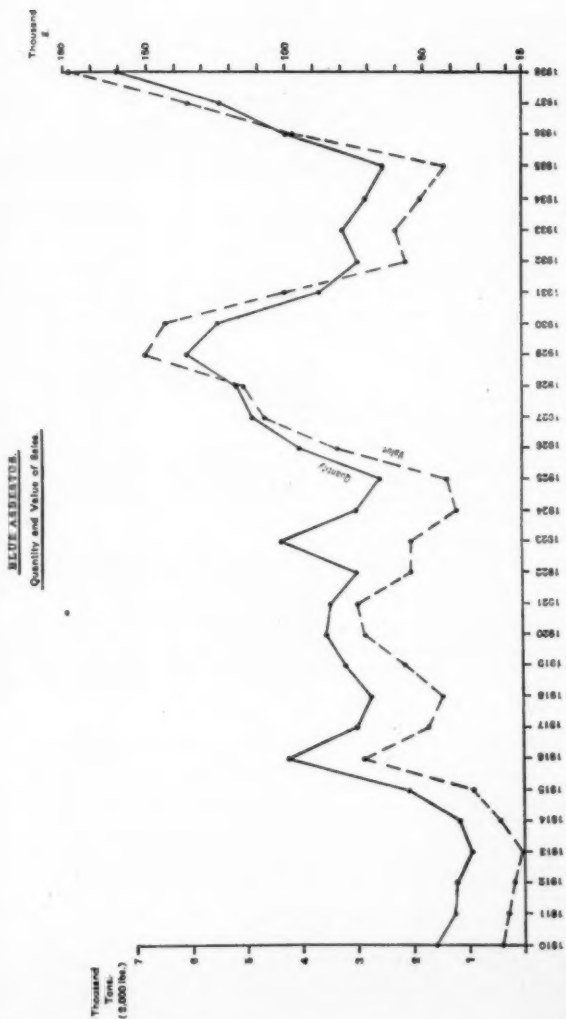
Asbestos is not the name of a specific mineral but rather a commercial term applied to a number of silicate minerals which occur in a finely fibrous form. Essential requirements, for the majority of industrial uses to which the various types of asbestos are put, are that the fibres should be easily separated, that they should be soft and flexible, but at the same time possess a fairly high tensile strength. There are, however, limited uses for comparatively brittle fibres. Other desirable properties are incombustibility and resistance to heat, acids and various chemical solutions.

The common asbestiform minerals or varieties of asbestos are:

- (1) Chrysotile or serpentine asbestos (also known as White asbestos).
- (2) Crocidolite or Blue asbestos.
- (3) Amosite.
- (4) Tremolite.
- (5) Anthophyllite.
- (6) Actinolite.

All of these, excepting chrysotile, belong to the amphibole group of minerals and are sometimes collectively spoken of as amphibole asbestos to distinguish them from chrysotile.

Chrysotile invariably occurs in some form of serpen-



Sales of Blue Asbestos in the Union of South Africa.

tine whereas amosite and blue asbestos are generally found in banded ironstones. All three commonly occur in cross fibre seams in which, as the name indicates, the fibres are roughly at right angles to the plane in which they lie. In the banded ironstones this plane corresponds to the bedding planes, while the chrysotile fibres occur in seams which usually show some sort of parallelism in their disposition within the serpentine body in which they occur. The fibres sometimes lie obliquely within the seams owing, usually, to local disturbances, and this finds an extreme variation in "slip-fibre" which lies almost parallel to the containing seams. Such fibre is of much lower quality than the corresponding cross-fibre.

The different varieties all compete with each other to a certain extent yet there are pronounced differences in the chemical and physical properties which make each type of asbestos particularly suited for certain specific industrial uses. Tremolite, anthophyllite, and actinolite are rather brittle and are only employed for purposes which require some low-priced fibrous mineral and for which tensile strength is not required. These fibres hardly total one per cent of world production and are mostly used within the country of their occurrence—Finland exports small tonnages of anthophyllite.

The Union of South Africa is unique among asbestos-producing countries of the world in that it can supply the three principal varieties of asbestos fibre, viz., chrysotile, blue asbestos, and amosite, the latter two being almost wholly confined to this country. South Africa ranks fourth among world producers of asbestos fibre. Recently crocidolite asbestos deposits of Western Australia have been opened up and this fibre may secure a footing on the world's markets and thus become South Africa's only competitor in the blue asbestos field. Blue asbestos fibre has been reported from South Australia and Bolivia, and possibly Chile, but these fibres have a much lower tensile strength and less resilience than the South African crocidolite; chemically, they differ mainly in containing much less ferrous oxide and

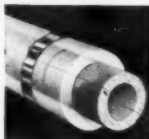
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more magnesite. As far as is known this type of fibre is not being exploited.

To underline the uniqueness of this country as an asbestos producer, it must be added that tremolite fibre was produced for a time in Natal and that anthophyllite asbestos, known locally as asbestie, is produced intermittently to supply a limited local demand. Thus five classes of asbestos fibre have been produced in South Africa—a unique record for one country.

The two principal producers of chrysotile asbestos have virtually ceased operations in the Union owing to the depletion of the known ore reserves. The Havelock mine, situated close to the Transvaal border, lies in Swaziland, a British Protectorate, and has recently commenced production. This mine is under the control of the firm of Turner and Newall, Ltd. It has been stated that no less than £750,000 has been spent in bringing the mine to the producing stage, this enterprise ranking as one of the most ambitious in the annals of base mineral production in Southern Africa. Owing to the mountainous nature of the country, an aerial ropeway of 12½ miles length has been built from the mine to Barberton railway station.

Fortunately the drop in chrysotile production of the Union has been partially offset by an improvement in the output of both amosite and crocidolite fibres—the total asbestos production figures for 1937 and 1938 are 28,069 and 23,148 short tons respectively. A noteworthy development has been the marked increased production of blue asbestos from the Pietersburg crocidolite fields. This material, termed "Transvaal blue," is generally of a somewhat inferior quality as compared with the bulk of "Cape blue" but the knowledge that large tonnages await exploitation in the Transvaal should lead to a steady demand. This comparatively new source of supply of blue fibre should find specific uses in industry as long as it can be supplied at economic prices to overseas manufacturers.

The second article in this series, which will appear in our May number will describe the deposits of Chrysotile asbestos in the Union.

ASBESTOS

In a Multitude of Forms . . .

For more than three-quarters of a century, Johns-Manville has been manufacturing a large variety of asbestos products, contributing to greater comfort, protection from fire and the more efficient operation of industrial equipment.

Johns-Manville owns and operates Asbestos Mines in Arizona and Canada, thirteen factories located strategically across the continent, sales offices in all large cities and a large, scientifically equipped research laboratory in which J-M Engineers and Scientists are constantly developing new uses for this remarkable mineral, Asbestos.

Some of the better known J-M Asbestos products include: Packings, Insulations, Roofing and Siding, Transite Water Pipe and Electrical Conduit, Office Partitions, Decorative Wall Boards, Flooring and Friction Materials. In addition, Johns-Manville furnishes raw asbestos in a wide range of grades and fibre lengths.

For complete information on J-M Asbestos Products write to any J-M office or distributor.

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ASBESTOS-CEMENT DUCTS

Help Speed Traffic on Route to Florida

Six much traveled highways converge within the limits of the City of Mobile, at the mouth of the Mobile River.

Perhaps the most important of these, nationally, is U. S. Route No. 90, which leads to Pensacola, Fla. Others serve local traffic, much of which goes to the bayside beaches and those highways are crowded with motor cars most of the time.

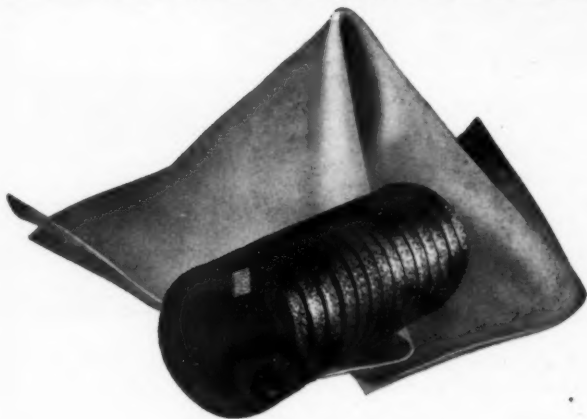
Something had to be done about this bottleneck, especially as the connecting streets in the city, which form the much traveled U. S. Route No. 90, were narrow. The Bankhead Tunnel, recently completed at a cost of about \$4,000,000, not only solves this traffic problem but saves a seven mile detour and therefore is worth all its costs.

The tunnel is 3,888 feet long, 2,000 feet of which is underwater tube. It is similar in construction to the tunnel beneath the Detroit River between Detroit, Mich., and Windsor, Ont., that is, made up of sections built on the shore, launched, and sunk in a trench in the river bed.

While this information is interesting from a general viewpoint, to the readers of "ASBESTOS" the most important part of the tunnel is the series of ducts, which carries the lighting circuits, telephone lines, etc. Important!—because the 70,000 feet of electric wiring controls not only the up-to-the-minute lighting system but also the ventilation of the tunnel. These ducts are installed in the side walls; they are made of asbestos-cement and are a product of Johns-Manville manufacture under the trade name of Korduct. Forty thousand feet were used in this Bankhead Tunnel, this particular type of duct being selected because it is incombustible, immune to electrolysis, unaffected by moisture or heat, and highly resistant to acids and alkalies which frequently attack many other

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A busy scene in the Bankhead Tunnel when in course of construction.

Note Korduct at right of picture.

Korduct ready for the enveloping concrete. It is light in weight and can be rapidly installed.



materials. High thermal conductivity facilitates rapid dissipation of heat from the cables.

Korduct is especially designed for use where the duct is incorporated in concrete or masonry structures and it is therefore a highly suitable material to use for carrying the telephone and electric lines in tunnels of this character.

The ducts were installed in the Bankhead Tunnel at Mobile by The Arundel Corporation of Baltimore, general contractors for the job; the dredging of about 1,000,000 cubic yards of mud was handled by the Murnan Dredging Company.

Photographs above give an idea of the use of Korduct in the tunnel as well as of the interior of the tunnel itself.

—:—

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A. S. T. M.¹ STANDARD TESTS ON THERMAL INSULATING MATERIALS

Committee C-16, at its meeting during A. S. T. M. Committee Week in Washington, March 3 to 7, gave consideration to the expansion in its scope of activity recently approved by the Executive Committee of the A. S. T. M. to cover thermal insulating materials in the building construction field. As a result of this addition to its field of endeavor, the Committee plans to enlarge its membership to include those having an interest in this material. Means of initiating work on this subject were discussed.

A subcommittee, under the chairmanship of *R. H. Heilman*, Mellon Institute of Industrial Research, has been studying a number of methods in current use for determining the physical properties of preformed insulation. As a result of this work, proposed standard methods have now been completed for determining the crushing strength and flexural strength of preformed block thermal insulation. Proposed definitions for preformed block insulation and for thermal insulating cement will be submitted to the Society for publication as tentative.

The subcommittee which deals with studies of the physical properties of plastic insulation, under the chairmanship of *H. H. Rinchart*, Johns-Manville Corp., reported the completion of several new methods. These cover a detailed procedure for mixing thermal insulating cements and complete methods of test for covering capacity and volumetric change upon drying for thermal insulating cements, and a test for bulk density of thermal insulating cement.

The subcommittee dealing with blanket, flexible, loose-fill and miscellaneous insulation, under the chairmanship of *R. E. Cryor*, Union Asbestos and Rubber Co., presented to the committee a new method of test for deter-

¹ American Society for Testing Materials, 260 S. Broad St., Philadelphia, Pa.

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mining the thickness and density of blanket type thermal insulating materials.

The Joint Committee on Thermal Conductivity of all Forms of Insulation sponsored by four organizations, namely, American Society of Heating and Ventilating Engineers, American Society of Refrigerating Engineers, National Research Council, and A. S. T. M., has developed a method of test for the determination of thermal conductivity by use of the guarded hot plate method. Further study is to be given this method by the joint committee before submitting it to the sponsoring organizations.

Officers of Committee C-16 on Thermal Insulating Materials are: Chairman, J. H. Walker, Engineer Assistant to General Manager, The Detroit Edison Co.; Secretary, E. T. Cope, The Detroit Edison Co.

CUBA PROHIBITS RE-EXPORTATION OF ASBESTOS

A general prohibition against the re-exportation of an extensive list of imported basic war materials, largely arms, munitions and implements of war, minerals and mineral products, chemicals, etc., has been established in Cuba by presidential decree No. 343 of February 12, 1941, promulgated in the *Gaceta Oficial* of February 17, 1941.

The decree states that these imported raw materials and products are necessary for the functioning of various industries in Cuba and at present are available only in United States markets.

Included in the list are the following basic materials and products containing them: Aluminum, antimony, *asbestos*, chromium, graphite, jute, rubber, silk, tin magnesium, etc.

It is stated that the restrictions shall expire when the United States abolishes its system of control upon the exportation of such products.—(From *Foreign Commerce Weekly* of March 8, 1941).

In view of the above prohibition by the Cuban Government, the Acting Secretary of State of the U. S. A., has issued general licenses to authorize exports to Cuba of various products and articles. The number of the General License for *asbestos* is GAC-3.

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MARKET CONDITIONS

GENERAL BUSINESS

Practically all business is by this time feeling the effect of the Defense Program. Those basic defense industries such as airplanes, munitions, ships, are first in line, while second come the thousand and one articles needed for the building of cantonments and the equipping of the trainee camps and the trainees themselves, followed by those parts and products (of which asbestos is one) which are needed in the making of the various defense articles, the machinery and tools by which these many articles are made, and so on down the line, concluding with the many luxuries which because of increased purchasing power of the masses are even at this time conscious of more business.

The next step, we presume will be shortages as it will be practically impossible for manufacturers to keep up with the tremendous increase in volume each turning of the wheel brings closer.

There is no lack of business nor is there any lack of problems with which business is faced.

ASBESTOS - RAW MATERIAL

The demand for Canadian Asbestos Fibres of all grades in the United States continues strong and prices are firm.

Shipments to the United Kingdom are limited only by the amount of steamship space available.

With the exception of mines at Black Lake, all Canadian producers are operating at capacity.

ASBESTOS—MANUFACTURED GOODS

Textiles. This commodity is in strong demand and while there has been no rapid increase in prices, they have stiffened and appear quite stable at the present levels. This is especially true of fine textiles and electrical tapes and cloths.

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14 Front St.

Brake Lining. February sales not only increased over those for the same month last year and over those for the previous month, but were the highest for any other month since May, 1937. Sales for domestic consumption, during February, 1941 were higher than those for any other February during the past ten years. Export sales also recorded increases over last February as well as over January, 1941.

Paper. Demand is somewhat above normal for this season and prices are firm.

Millboard. The call for this commodity far exceeds production, and need we state that the building of cantonments is responsible for this, with the shipbuilding program due to enhance demand for this commodity very shortly.

Insulation. High Pressure. Shipments continue at a high level and current demand indicates a continuance of this situation for some time to come. Prices are firm.

Insulation. Low Pressure. Here again the volume is found to be on the increase, with a natural inclination toward higher prices; in fact prices have already improved in some sections.

Asbestos-Cement Products. National defense projects continue to take large quantities of asbestos-cement roof shingles and of sidings, as well as corrugated and flat sheets, so that the industry finds itself with substantial backlogs of unfilled orders, as well as prospects for long continued activity at practically capacity production. Prices continue firm and conditions generally are quite satisfactory.

These comments have been sent us by those who are closely in touch with the movements in the various markets. Such comments are always welcomed.

—:—

He is the richest man who knows how to draw a benefit from the labors of others.—Emerson.

—:—

Language was made so that we could say pleasant things to each other.

Rhodesian

SHABANI MINE — SHABANIE
GATH'S MINE — MASHABA

African

HAVELOCK MINE — SWAZILAND

Canadian

BELL MINE — THETFORD MINES, P. Q.

**A
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B
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O
S**

Raw Asbestos Distributors Limited

Spotland
ROCHDALE, Lancs., England.

THEY SAY!

New Jersey plants of Johns-Manville, Flintkote Company, Asbestos Limited, Ferodo & Asbestos, Inc., and Raybestos-Manhattan, Inc., were among certificate winners in the 13th annual New Jersey Statewide Interplant Safety Contest, results of which were recently announced. The period covered by the contest was the last 13 weeks of 1940.

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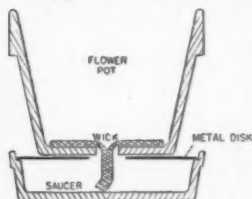
Generally speaking, asbestos veins in serpentine rock occur most frequently in *green* serpentine. When the rock is dark it is usually barren of asbestos.

—:—

From a raid safety viewpoint there is much to recommend asbestos-cement. Not only is it fire resisting to a high degree, but when scattered or broken up by the force of an H. E. bomb, the "splinters" are not so dangerous as those thrown off by masonry or even timber.

—:—

The Atlas Asbestos Company of North Wales, Pa., are the originators of a new wick made (we regret to state) from spun glass yarn, the particular purpose being for plant sub-irrigation. The illustration at the left shows how it works, and if any of our readers are flower growing



enthusiasts, they will find a complete description in the December 28, 1940 issue of *Florists Exchange* (published at 438 W. 37th St., New York City). Curiously enough the article states that "The wick is best made of fiberglas cloth or asbestos."

The use of these materials is stressed because neither will decay in soil and also because they give uniformly better capillary movement of water than cotton or other fabric.



Ruberoid Asbestos Paper has everything! Wet strength, accurate caliper, color and finish. The color is a soft natural blue-white. The finish is smooth on one side—rough textured for adhesion on the other side. Ideal for protecting air conditioning ducts, wood partitions, lining stoves, ovens and gas ranges.

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ASBESTOS PAPERS

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SEWAGE TREATMENT--

The Z-Process Utilizes Asbestos

By Dr. E. Bindschedler¹

Asbestos fibres may play an important part in sewage treatment. This fact was brought out in an article which appeared in the July 1938 number of "ASBESTOS".

The process referred to in that article, briefly designated as the Z-process, was invented by Paul Zigerli, Civil Engineer of Zurich, Switzerland. (See U. S. Patent No. 2,158,954, granted May 16, 1939).

According to the invention, the purification of sewage and other waste liquors is effected with asbestos. The asbestos fibres, when immersed in the sewage, form a very loose, floating filter; they may be used alone or in conjunction with a carrier material. The asbestos fibres, being slightly heavier than water, will not float directly on the surface of the sewage but *below* the surface. The asbestos may be used either alone or with an oxydizing agent, for instance, air or ozonized air.

A bacterial activation takes place on the asbestos fibres (which can be charged up to 300% of their weight with solids from the sewage). The biological action is similar to the one in the activated sludge process but it is claimed is obtained by the Z-process in a much smaller space.

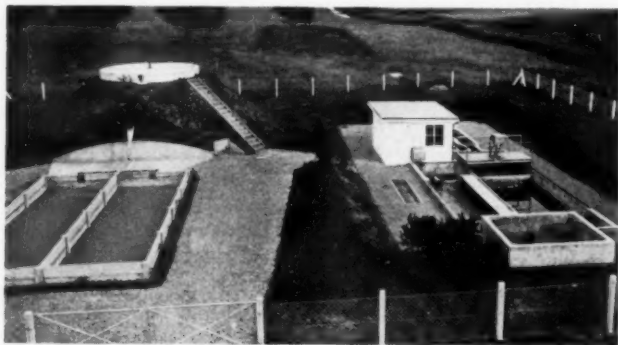
Since trying out the process in the pilot plant near St. Gallen, Switzerland (as described in the July 1938 article) the Z-process has been in use at Kloten near Zurich. The plant set up there takes care of the sewage from 2400 inhabitants, and the results obtained in the pilot plant at St. Gallen have been fully confirmed at Kloten. This Kloten plant has been described in detail by Jac Mueller, Civil Engineer of Zurich, in the October 7, 1939 number of Schweizerische Bauzeitung.

The quantity of asbestos used by this process is calculated as follows: The amount of sewage produced at

¹ Dr. Bindschedler is representative for Mr. Paul Zigerli in the United States.

Zurich where the comparative tests have been made is approximately 450 liters, or 120 gallons, per inhabitant per day. Therefore the sewage from 10,000 inhabitants is 1,200,000 gallons daily, or 438,000,000 gallons per year. The loss, or consumption, of asbestos is 10 pounds per million gallons, making 4380 pounds per year, or approximately 2 gross tons, for a plant built to take care of the sewage from 10,000 inhabitants. There is, of course an initial requirement of asbestos at the start of operations. This amounts to about 3,000 pounds.

In addition to the possibilities which the Z-process offers for the purification of sewage, there exists another large field in the U. S. A. for the treatment of industrial waste waters, for instance from sugar cane factories, dis-



The Sewage Plant at Kloten, Switzerland

tilleries, tanneries, slaughter houses, etc., where asbestos can be used to great advantage. One of the most difficult problems in this field is the waste waters from tanneries. According to extensive tests made on a pilot plant scale in Switzerland, the inventor believes the problem can be successfully solved by the application of the Z-process using asbestos fibres without addition of expensive chemicals.

Editor's Note: This Z-Process has not yet been given a trial in the U. S. A., and it therefore remains to be proven whether it is practical in this country.

CONTRACTORS AND DISTRIBUTORS PAGE

Building

Private Building has not been discouraged by moderate rise in building costs, says F. W. Dodge Corporation.

The volume of small home construction during February in the 37 Eastern States came nearer 1928 levels than the volume of any February since that year. More than eighteen thousand new dwelling units were provided during the month by activity in the building of one- and two-family houses, which accounted for 34 per cent of the \$270,373,000 total contract volume in February.

The dollar valuation of contracts awarded for small house construction, amounting to \$90,782,000, represented an increase of 59 per cent from the volume of \$57,118,000 recorded for February 1940. More than eighty per cent of this February's total was provided thru private-ownership building.

Even tho the demand placed upon building materials by defense construction needs caused some advances in lumber prices last autumn, material prices have been generally steady since the opening of this year. Less local difficulties in material deliveries are being experienced since the peak of buying for cantonments has passed. Continued increases in applications received by the F. H. A. for mortgage insurance are further evidence of strong demand for private residential building.

—:—

There are still some copies left of the **Twelve Tables for Estimating**. These tables cost \$1.00 a set and cover Areas Pipe Covering, Fittings of various sorts, Flange Areas, Anti-Frost Insulation, Cork Pipe Covering, Figuring of Hair Felt, etc. They are sent flat, two tables to a page, in heavy paper folder. Estimators find them handy. Send orders to "ASBESTOS," 16th Floor, Inquirer Bldg., Philadelphia, Pa.

—:—

See page 8 for the latest Installation Story.

—:—

Coming—an article by John Roche of the National Safety Council, on "Safety Problems of the Insulation Contractor."

NEWS OF THE INDUSTRY

BIRTHDAYS

- P. O. Baker, Providence, R. I., April 18.
A. D. Simpson, General Manager, Asbestos Erectors, Bound Brook, N. J., April 19.
George A. MacLellan, Managing Director, George MacLellan & Co., Glasgow, Scotland, April 19.
Frank T. Hearst, Manager, Kelley Asbestos Products Co., Kansas City, Mo., April 20.
H. H. Robertson, President, H. H. Robertson Co., Pittsburg, Pa., April 21.
S. D. Van Vleet, Comptroller & Secretary, The Ruberoid Co., New York City, April 24.
J. Carroll Johnston, President & Treasurer, Atlas Asbestos Company, North Wales, Pa., April 28.
John Lotz, Jr., Pres., Lotz Asbestos Co., Hartford, Conn., April 29.
Clare S. Jamar, Vice President, Walker-Jamar Co., Duluth, Minn., April 29.
Merlin W. Simon, Secretary, Sprinkmann Sons Corp., Milwaukee, Wis., April 30.
Richard H. Jaffer, President, York Insulation Co., Inc., Hillside, N. J., May 1.
George S. Fabel, President, Southern Asbestos Co., Charlotte, N. C., May 7.
L. L. Cohen, President, Union Asbestos & Rubber Co., Cicero, Ill., May 7.
A. M. Ehret, Sr., Chairman, Ehret Magnesite Mfg. Co., Valley Forge, Pa., May 15.

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THE U. S. BUREAU OF CENSUS, Department of Commerce, issued on March 22, preliminary report (for 1939) on expenditures for plant and equipment for the Miscellaneous Nonmetallic Mineral Products Sub-Group.

This report includes figures for Asbestos Products, with a separate group of figures for Steam and Other Packing and Pipe and Boiler Covering. Copy of the report may be obtained by request to the Bureau of Census.

KEASBEY & MATTISON COMPANY announce the appointment, on March 15th, of John H. Dingee, as Advertising Manager. Mr. Dingee has been with the Company for several years in the Advertising Department, and succeeds Henry C. Whittlesey, resigned.

G. A. MacARTHUR -- Dies in Sixty-sixth Year

Glenn Allen MacArthur, President and Treasurer of the G. A. MacArthur Company, died at his home in St. Paul, Minn., on March 3rd of cerebral hemorrhage, in his sixty-sixth year.



Mr. MacArthur was born at Court-right, Ontario, Canada, on May 6, 1875, migrating to Minneapolis, Minn., in 1894 at the age of nineteen, where he attended business college.

After his graduation he became engaged in the construction industry and for a time was employed in Railroad Bridge Building projects in British Columbia and in Indiana.

Mr. MacArthur entered the asbestos industry in 1909 as business manager for A. B. Flag Company of Minneapolis, manufacturer of pipe coverings.

In 1911 he established the Twin City Pipe Covering Company in St. Paul, purchased the business of the A. B. Flag Company and consolidated the two. The new company was incorporated in 1913 and in 1931 the corporate name was changed to G. A. MacArthur Company.

His death is a real loss to the Insulation Industry.

—:—

G. A. BARKER--Appointed to Managership

Appointment of G. A. Barker, as Manager of Johns-Manville's Public Utility and Electrical Products Department was announced on April 2nd by L. R. Hoff, President of J-M Sales Corporation. Mr. Barker, who has specialized in the development and sale of electrical commodities, was formerly staff manager of the electrical department for Johns-Manville.

An honor graduate of the University of California, College of Mechanics, Mr. Barker joined Johns-Manville in 1921 as Pacific Division Manager of the Power Products Department at San Francisco. Prior to that he was associated with the Pacific Gas & Electric Company in San Francisco, chief engineer for the Central Teresa Sugar Company, Cuba, and chief mechanical engineer of the Industrial Accident Commission of California.

Mr. Barker resides in Scarsdale, N. Y., and is a member of the Rye Country Club and Sigma Xi and Tau Beta Pi, honorary engineering fraternities.

• BLUE ASBESTOS

The Cape Asbestos Company, Ltd., is the world's largest supplier of acid-resistant blue crocidolite asbestos, and the only manufacturer operating its own mines. Inquiries solicited on:

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PROCESSED FIBRES

Unexcelled for use in

ASBESTOS CEMENT PIPES

• AMOSITE ASBESTOS

This fibre owing to its great length and bulk is unrivalled for use as an insulating medium in:

Asbestos mattress filler

85% Magnesia insulation

The CAPE ASBESTOS CO. Limited

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FACTORY, BARKING, ESSEX

United States Sales Agent:

ARNOLD W. KOEHLER

415 LEXINGTON AVE.

NEW YORK CITY

TELEPHONE—VANDERBILT 6-1477

ASBESTOS SPECIMENS--Presented to McGill University by Asbestos Corporation Limited

The collection of asbestos specimens formerly owned by Mr. B. Marcuse of the Canadian Asbestos Company, has been purchased from his Estate by Asbestos Corporation Limited, and presented to the Mining Department of McGill University at Montreal, Canada, where it will remain in the Geological Department of the Redpath Museum under Mr. Marcuse's name.

The collection was gathered together by Mr. Marcuse over the space of many years and is considered one of the most extensive collections of the kind ever made, containing hundreds of samples and filling five large cases.

—:—

HENDERSON M. GREEN--Vice President Raybestos- Manhattan, Inc., Passes Away

Henderson Montgomery Green, a Vice President and Director of Raybestos, Inc., since its incorporation September 5, 1929, died Monday, March 10, at his residence in Montclair, N. J., after an illness of several months. He was 67 years old.



Henderson M. Green

Mr. Green, whose office in New York was at 120 Broadway, was a Director of The Manhattan Rubber Mfg. Company from December 14, 1914 and a Vice President from February 17, 1916 until the incorporation of Raybestos-Manhattan, Inc., now leading manufacturers of brake lining and mechanical rubber goods. He was also a Director of The Manhattan Securities Company which owns plantations supplying a large portion of the crude rubber used by The Manhattan Rubber Mfg. Division at Passaic, N. J.

Mr. Green was active in the mechanical rubber goods industry for more than 35 years and was well known in the mining industry in North and South America. He was a member of the Bankers Club of America and the Montclair Golf Club.

—:—

THERMAL STUDIES ON ASBESTOS. The third article (see page 30 of March "ASBESTOS") in this series was published in the March number of the Canadian Journal of Research (National Research Council, Ottawa, Canada) under the title "Effect of Heat on the Breaking Strength of Asbestos Cloth Containing Cotton". The author is D. Wolochow of the Division of Chemistry, National Research Laboratories at Ottawa.

THE PHILIP CAREY MFG. COMPANY, in its annual consolidated report for the year ended December 31, 1940, shows a net profit of \$424,058 after all charges, including Depreciation, Depletion, Social Security, Federal, State and County direct taxes. This compares with a net profit of \$354,033 for the year 1939.

The net profit for 1940 after the year's provision for five and six per cent preferred dividends is equal to 81c per share on the 394,741 common shares outstanding at December 31, 1940 and compares with 62c per common share at December 31, 1939 on a like number of shares.

Operating profit after all charges, but before taxes and depreciation, for 1940, was \$1,283,934 compared with \$1,008,942 for the preceding year.

Provision for all direct taxes was greatly increased in 1940, the total (Federal, State and local) for the year being \$521,351, compared with \$316,200 for 1939.

The Company employed and maintained work thruout the year 1940 for an average of 2,949 people.

Dividends paid during the past year, including current and all arrears on the five and six per cent preferred stocks and a dividend of 10c per share on the common stock, amounted to \$231,664.

Current Assets at December 31, 1940 were in the amount of \$6,781,016 against Current Liabilities of \$2,359,919, compared with \$5,861,406 and \$1,936,420 respectively at the end of 1939.

In commenting on the above report, and on the present situation in the construction field, G. D. Crabbs, Chairman of the Board, says:

"The substantial improvement in building construction of all kinds, residential, government housing projects and industrial defense plants during the last nine months of 1940 affected favorably both volume and net profits and resulted in a substantially increased volume of sales as compared with 1939.

"During the last half of 1940 the company began to feel the demand for many of its products required in connection with the defense program. This demand has been steadily increasing and at the present time a substantial part of our production is being devoted to national defense . . . As a result of this activity and the increasing demand from public utilities, railroads and the oil refining industry, etc., the Company should realize a substantially increased volume during 1941 as compared with 1940."

THE SOUTH AFRICAN MINING & ENGINEERING JOURNAL publishes in its February 8th issue an article on "Mines of Mashaba, Southern Rhodesia", a column of which is devoted to describing the various Asbestos Deposits in that locality, viz: Gath's, King, Regina, D. S. O. and Murie.

JOHNS-MANVILLE in annual report covering the year ending December 31, 1940, shows a net profit for that year of \$5,822,071, compared with \$4,127,691 in 1939.

After payment of preferred dividends, earnings in 1940 amounted to \$6.35 per share of common stock.

Sales for 1940 amounted to \$61,761,236, an increase of 19% over sales of \$52,047,720 in 1939.

Current Assets totalled \$25,940,484, against current liabilities of \$7,243,005, a ratio slightly in excess of 3.5 to 1.

Consolidated Income Account for 1940, compared with 1939, follows:

	Year ended Dec. 31, 1940	Year ended Dec. 31, 1939
Sales, less cash disc. and allowances	\$61,761,236.25	\$52,047,719.64
Mfg. Cost, selling and admin. exp., etc.	51,046,894.37	44,723,092.05
	<u>\$10,714,341.88</u>	<u>\$ 7,324,627.59</u>
Depreciation	\$ 1,379,316.10	\$ 1,464,626.03
Depletion and obsolescence of mineral properties	642,954.87	685,527.18
Unrealized loss from translation into U. S. currency of Canadian net current assets		95,266.55
	<u>\$ 2,022,270.97</u>	<u>\$ 2,245,419.76</u>
Net income before div. from sub. and provision for income and excess profits taxes	\$ 8,692,070.91	\$ 5,079,207.83
Div. recd. from J-M Credit Corp.	560,000.00	
Net income before provision for income and excess profits taxes	9,252,070.91	5,079,207.83
Provision for Federal and Canadian excess profits taxes	3,370,000.00	951,516.93
Net income	5,882,070.91	4,127,690.90
Dividends paid on preferred stock	485,625.00	525,000.00
Net income available for com. stock ...	5,396,445.91	3,602,690.90
Dividends paid on common stock	2,337,500.00	2,337,500.00
Balance to earned surplus	\$ 3,058,945.91	\$ 1,265,190.90

1 Including \$600,000 for federal excess profits taxes under the Second Revenue Act of 1940.

ASBESTOS MANUFACTURING COMPANY, Huntington, Ind., according to recent newspaper notices, reports net income for 1940 of \$92,606, or 21c a common share, compared with \$85.812 or 19c a share in 1939.

The mortgage indebtedness was reduced to \$70,832 at the close of 1940 from \$199,000 a year earlier and subsequently the entire balance was paid off, Nelson S. Talbott, Chairman, told stockholders, this being accomplished by borrowing \$50,000 on an open line of credit and using \$20,832 from the company's treasury. Quarterly dividends on the preference stock were resumed in 1940 and it is the hope of the management to pay most, if not all of the arrears on the preference stock before the next annual meeting in 1942.

THE THERMOID COMPANY of Trenton, N. J., in its annual report for 1940 shows net earnings of \$1,003,808.50 after all charges, including provision for depreciation of \$220,407.92. After deducting interest charges and Federal taxes, and a \$50,000 reserve for contingencies, there remained \$602,739.78 for Preferred and Common Stock. Allowance of \$119,448 covering annual dividends of \$3.00 per share on the outstanding Convertible Preferred Stock, left a little over \$1.00 per share on Common, this comparing with 65c per share on the Common for the preceding year.

Current Assets totalled \$3,125,952.95, against current liabilities of \$758,326.17, a ratio of over 4.1 to one.

The Company paid all accumulated dividends due on its Preferred stock during 1940, totaling \$5.25 per share, and a regular quarterly dividend of 75c per share was paid on March 15, 1941.

Profit and Loss Account for the year ended December 31, 1940, follows:

	Year Ended Dec. 31, 1940
Gross Sales	\$8,609,477.64
Less returns, freight and discounts	737,844.56
Net Sales	7,871,633.08
Cost of Sales exclusive of Depreciation	5,190,315.84
Gross Profit (exclusive of Depre.)	2,681,317.24
Selling, General and Admin. Exp., provision for doubtful accounts and provision for depre.	1,679,902.71
Operating Profit	1,001,414.53
Misc. Income	2,393.97
	1,003,808.50
Int. on Funded debt, amortization of debt discount and expense	132,678.94
	871,129.56
Federal Income Taxes and Contingencies	267,897.34
	603,232.22
Deduct proportion net income of Southern Asb. Co. applic. to Minority Stockholders' Interest	492.44
Net Income	\$ 602,739.78



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AMERICAN ROOFER

425 Fourth Avenue

New York City

TILO ROOFING CO., INC., of Stratford, Conn., reports net profit in 1940 of \$526,225.91, compared with \$529,612.11 in 1939. The earnings on each share of Common Stock for 1940, after preferred dividend requirements, were \$1.08, compared with \$1.19 in 1939.

Sales in 1940 totalled \$4,018,167.03 compared with total sales of \$3,775,524.15 in 1939, an increase of 6%.

The ratio of current assets to current liabilities on December 31, 1940 were 3.43 to 1, based on current assets of \$2,886,955.34 and current liabilities of \$842,809.43.

Cash dividends amounting to \$1.05 for the year were paid in 1940 on the Common stock.

Follows the Consolidated Statement of Income:

	Year Ended Dec. 31, 1940
Sales	\$ 4,018,167.03
Cost of Sales	1,991,471.00
	\$ 2,026,696.03
Branch Office, selling and general expenses	1,385,810.73
	\$ 640,885.30
Miscellaneous income including cash disc. on purchases, interest, etc.	55,182.42
	696,067.72
Deductions, including interest on indebtedness	4,518.81
	691,548.91
Provision for federal taxes on income, including \$25,823. for subsidiary companies	165,323.00
Net income	\$ 526,225.91

HOLDERBANK FINANCIERE GLORUS of Switzerland (parent company of National Portland Cement Co. (Pty.) Ltd., of Cape Town) has delegated its managing director, E. Schmidheiny and H. R. Beneke to investigate in co-operation with Turner & Newall, Ltd., the possibilities of erecting an asbestos-cement factory in South Africa, for the production of all kinds of asbestos-cement products. This according to the South African Mining & Engrg. Journal of March 15, 1941.

GLADDING, MCBEAN & CO., of Los Angeles, Calif., recently took over the asbestos lease held by Norman F. Barber (Arizona Asbestos Corporation) as well as his mill and mining equipment. The company will continue operation of the property with Mr. Barber as Manager, using a large portion of their production for their own requirements and selling any surplus.

THE ASBESTOS CORPORATION OF AMERICA of New York City, has purchased the industrial plant at 453-55 Communipaw Ave., Jersey City, N. J. from the Amsco Wire Products Corporation. The three story structure occupies a plot 138x135 feet.

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Speaking of personality, have you ever noticed how much personality your windshield wiper has!

PATENTS

This information obtained from the Official Patent Gazette, published weekly by the U. S. Patent Office, Washington, D. C.

Combined Asbestos and Glass Fibre Yarns. No. 2,230,271. Granted on February 4, 1941, to Donald C. Simpson, Newark, O., assignor to Owens-Corning Fiberglas Corp., Toledo, O. Original application May 22, 1937. Serial No. 144,247. Divided and this application August 24, 1938. Serial No. 226,506.

The method of producing a sliver composed of combined glass and asbestos fibres which comprises forming an open web of long, fine glass fibres, distributing a mass of asbestos fibres into said open web and drafting said web together to close the intervening spaces between the fibres and permitting inter-jacent asbestos fibres to be seized and interfelted therewith in a compact, mutual, interfelted, coherent sliver.

Apparatus for Making an Asbestos Product. No. 2,330,880. Granted on February 4, 1941, to George B. Brown, Manville, N. J., assignor to Johns-Manville Corp., New York, N. Y. Application January 25, 1938, Serial No. 186,793.

An apparatus for making a fibrous and cement product which comprises a substantially air impermeable felting belt, a chamber positioned over the felting belt, and means for forming a dispersed mixture of fibres and cement in the chamber and for depositing the dispersed mixture as a layer upon the felting belt, said dispersing and depositing means including co-acting beaters positioned in the chamber over the felting belt and arranged in pairs and rotated so as to drive the dispersed mixture in the direction of said felting belt.

Building Insulation. No. 2,235,542. Granted on March 18, 1941 to Amanda Wenzel, Fox Point, Wis. Continuation of application Serial No. 412,057 of Dec. 6, 1929. This application August 24, 1937. Serial No. 160,649.

A method of insulating walls, ceilings and the like which consists in forming a mixture of comminuted paper and asbestos, blowing said mixture without moisture into the spaces therein and floating the particles of said mixture into light mutual contact to form a loose non-compacted mass substantially filling said space.

AUTOMOBILE PRODUCTION

In February 1941 total production of motor vehicles in the United States and Canada was 509,233 (485,523 in the U. S. A. and 23,710 in Canada); compared with a total production in February 1940 of 422,225 (404,032 in the U. S. A. and 18,193 in Canada) and a total the previous month, January 1941 of 534,126.

In the first two months of 1941 total production for the two countries was 1,033,359, compared with 871,717 in the first two months of 1940.



IMPORTS AND EXPORTS



Imports into U. S. A.

(Figures published by U. S. Dept. of Commerce)

Unmanufactured Asbestos:

	January 1940 Tons (2240 lbs.)	January 1941 Tons (2240 lbs.)
Africa (Br. S.)	1,083	1,987
Australia	2	.....
Br. India .....	.....	9
Canada	13,884	21,442
Italy	2	.....
	14,971	23,438
Value	\$712,693	\$1,081,01½

Tabulation by Grades:

Crude (Africa, Br. S.)	1,083	1,987
Crude (Australia)	2	.....
Crude (Br. India) .....	.....	9
Crude (Canada)	125	327
Crude (Italy)	2	.....
Milled Fibre (Canada)	5,405	8,207
Lower Grades (Canada)	8,354	12,908
	14,971	23,438

Manufactured Asbestos Goods:

	January 1940 Pounds	January 1941 Pounds
Belgium (Shingles)	65,185	.....
United Kingdom (Yarn)	3,441	4,025
United Kingdom (Packing)	3,727	1,730
United Kingdom (W. Fabrics)	224	1,927
	72,577	7,682
Value	\$4,829	\$4,105

Exports from U. S. A.

Exports of unmanufactured asbestos during December¹ 1940 amounted to 547 tons valued at \$73,456, compared with 422 tons, valued at \$35,471 in December 1939.

Exports of Manufactured Asbestos Goods:

	December 1939		December ¹ 1940	
	Quantity	Value	Quantity	Value
Paper, Mlbd., Rlbd. ....lbs.	204,289	\$21,108	482,121	\$30,605
Pipe Covg. & Cement ....lbs.	672,372	36,008	172,374	10,553
Textiles & Yarn lbs.	81,584	21,998	52,441	17,811
Packing lbs.	142,195	91,623	180,316	79,214
Brake Lining—				
Molded & Semi-Molded		69,906		47,960
Not Molded .....lin. ft.	80,125	17,096	43,589	10,960
Clutch Facings—				
Molded & Semi-M. units	8,266	5,974	19,092	6,118
Woven units	11,154	4,399	21,526	6,100
Magnesia & Mfrs. of ....lbs.	265,718	25,100	204,290	16,924
Asbestos Roofing .....sqg.	7,648	37,926	5,225	26,180
Other Manufactures ....lbs.	507,399	41,663	806,261	43,904

¹ Figures received too late for inclusion in our March number.

SUMMARY FOR THE YEAR — Exports from U. S. A.

Exports of unmanufactured asbestos during 1940 amounted to 3,995 tons, valued at \$449,105; compared with 2,208 tons, valued at \$218,830, in 1939.

	Year 1939		Year 1940	
	Quantity	Value	Quantity	Value
Paper, Mlbd. Rlbd. ....lbs.	1,637,587	\$122,543	2,462,318	\$196,232
Pipe Covg. & Cement ....lbs.	4,426,426	251,912	3,334,259	171,558
Textiles & Yarn .....lbs.	418,060	143,186	640,693	211,099
Packing lbs.	1,383,140	822,737	1,606,676	817,130
Brake Lining—				
Molded & Semi-Molded		714,679		635,425
Not Molded .....lin. ft.	886,069	178,393	638,037	139,146
Clutch Facings—				
Molded & S.-M. units	196,334	88,589	222,166	83,770
Woven units	130,159	40,555	189,792	63,399
Magnesia & Mfrs. of ....lbs.	2,965,723	308,723	2,745,891	225,985
Asbestos Roofing .....sqg.	54,634	284,643	70,505	413,735
Other Manufactures ....lbs.	4,629,257	398,960	5,912,754	515,769

RAW ASBESTOS

N. V. NEDERLANDSCHE ASBEST MY

P. O. BOX 803

ROTTERDAM (Holland)

Stock at Rotterdam

Exports of Raw Asbestos from South Africa

	July 1939		July 1940	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
Australia	35	£ 661	30	£ 558
Belgium	5	90	.....	.....
Canada .....	.....	.....	25	565
France	162	3,823	.....	.....
Germany	109	3,220	.....	.....
Japan	159	3,861	267	6,237
Poland	2	85	.....	.....
Sweden	9	194	.....	.....
United Kingdom	808	19,168	1,036	22,041
United States	369	8,422	990	22,970
	1,658	£39,524	2,348	£52,371

	August 1939		August 1940	
	Tons (2000 lbs.)	Value	Tons (2000 lbs.)	Value
Algeria	10	£ 182	.....	£ .....
Argentine	54	1,466	.....	.....
Australia	10	188	64	1,174
Belgium	15	287	.....	.....
Canada .....	.....	.....	50	1,126
Denmark	2	38	.....	.....
France	257	6,191	140	3,664
Germany	221	4,987	.....	.....
Italy	60	930	.....	.....
Japan	38	961	226	4,944
Portugal	9	264	.....	.....
New Zealand .....	.....	.....	10	242
Sweden	5	138	.....	.....
United Kingdom	610	13,358	318	6,016
United States	568	12,800	467	12,258
	1,859	£41,790	1,275	£29,424

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The new Spring 1941 catalog of the Chemical Publishing Co., Inc., 234 King St., Brooklyn, N. Y., contains many important new titles. Books of importance in all technical and scientific fields, and to National Defense, have been added to the previous standard authoritative works. Copy of this catalog can be obtained direct from the company by sending a 3c stamp to cover postage.

DO YOU KNOW--

¶ That Raybestos test car drivers during the past eight years have driven 3,500,000 miles, making constant stops in all types of weather and the only damage occurring during this time was one bent fender from a slight skid.

¶ That the hill where Canadian asbestos, according to some authorities, was first discovered was known as Webb's Ledge. . . .

¶ That serpentine, the rock commonly surrounding asbestos in the Canadian and other deposits, is sometimes polished and sold as ornamental marble known as verde antique. . . .

¶ That one of the earlier pipe and boiler coverings made and sold by the Manville Covering Company (a predecessor of Johns-Manville) was made of blue clay and wool felt shoddy and was known as Manville Sheep's Wool Cement. . . .

¶ That in 1940 91.5% of the United States' imports of Raw Asbestos came from Canada; 6.6% from Africa; in 1939 92% of its imports came from Canada and 4.6% from Africa. . . .

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PRODUCTION STATISTICS

Africa (Union of South).

(Statistics published by Dept. of Mines and Industries of U. of S. A.)

	October 1939 Tons (2000 lbs.)	October 1940 Tons (2000 lbs.)
<i>Transvaal</i>		
Amosite	1,143	1,402
Blue	302	69
Chrysotile	17	93
<i>Cape</i>		
Blue	509	558
	<u>1,971</u>	<u>2,122</u>

	Nov. 1939 Tons (2000 lbs.)	Nov. 1940 Tons (2000 lbs.)
<i>Transvaal</i>		
Amosite	993	1,571
Blue	98	117
Chrysotile	25	67
<i>Cape</i>		
Blue	525	570
	<u>1,641</u>	<u>2,325</u>

Canada

At the request of the Dominion Bureau of Statistics, the Quebec Bureau of Mines has temporarily discontinued the publication of statistics on asbestos production.

United States of America.

Sales of domestic asbestos by the U. S. A. producers during 1940 attained an all time high of 20,060 short tons, valued at \$674,508, an increase of 30% in tonnage and 32% in value, over the 1939 sales.

Consumption in the United States during 1940 was 262,199 short tons, valued at \$10,259,836, compared with 255,547 tons, valued at \$9,388,496 in 1939.

These figures are taken from statistics published by the U. S. Bureau of Mines.

CURRENT RANGE OF PRICE

Canadian	Per Ton (2000 lbs.) f.o.b Mine (In U.S. Funds)
Group No. 1 (Crude No. 1)	\$700.00 to \$750.00
Group No. 2 (Crude No. 2; Crude Run-of-Mine and Sundry)	150.00 to 350.00
Group No. 3 (Spinning or Textile Fibre)	110.00 to 200.00
Group No. 4 (Shingle Fibre)	57.00 to 85.50
Group No. 5 (Paper Fibre)	40.00 to 49.50
Group No. 6 (Waste, Stucco or Plaster)	30.00 to 32.00
Group No. 7 (Refuse or Shorts)*	13.00 to 28.00
Vermont—	Per Ton (2000 lbs.) f.o.b Hyde Park, Vt.
"Shingle" Fibre	\$57.00 to \$60.00
Paper Stock Fibres	40.00 to 48.00
Waste	30.00
Shorts	13.00 to 26.00
Floats	18.00

Note: Crude Run-of-Mine (Canadian) refers to a crude asbestos produced in certain mines where Crude Fibre is not graded into regular No. 1 and 2 Crude. Crude Sundry refers to certain odd lots of off grade material which do not conform to the regular standards of No. 1 Crude or No. 2 Crude.

ASBESTOS STOCK QUOTATIONS

(These figures are compiled from the Commercial and Financial Chronicle. No guarantee made as to their correctness).

	Par	March 1941		
		Low	High	Last
Armstrong Cork Co., (Com.)	np	28	30½	28½
Asbestos Corp. (Com.)	np	16	18	18
Celotex (Com.)	np	8½	9½	8½
Celotex (Pfd.)	100	65	70	68
Certainteed (Com.)	1	3¾	4¾	3¾
Certainteed (Pfd.)	100	27	30¼	28½
Flintkote (Com.)	np	13	14½	13½
Johns-Manville (Com.)	np	56½	61½	59¾
Johns-Manville (Pfd.)	100	124	128	125
Raybestos-Manhattan (Com.)	np	18½	20	19¾
Ruberoid (Com.)	np	16¼	17¾	17½
Thermoid (Com.)	1	4	5	4½
Thermoid (Pfd.)	10	31½	36	36
U. S. Gypsum (Com.)	20	61	65	63
U. S. Gypsum (Pfd.)	100	165	177	177

THIS and THAT

At the beginning of 1940 there were 70,000 employees on the payroll of the General Electric Company, exclusive of those employed by affiliated companies. At the close of the year the employees numbered 88,600, the average number during the year being 76,314.

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A book "Trade Association Executives and Public Relations" is available from the American Trade Association Executives, 726 Jackson Pl., N. W., Washington, D. C., at the price of \$1.00.

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A 16-page booklet "The Use of Ability and Aptitude Testing in Business" gives a simple explanation of the scientific plan followed by the Personnel Institute of Chicago in building "batteries" of tests for all types of sales, executive, clerical and production jobs. Aptitude testing is advanced as the modern method of saving a large part of the high cost of hiring and training employees. Copies of the study are available on request to Morris I. Pickus, The Personnel Institute, Inc., 225 N. Wabash Ave., Chicago, Ill.

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The American Section of the Society of Chemical Industry, will meet jointly with the American Institute of Chemical Engineers, on April 18th at The Chemists' Club, 52 E. 41st St., New York City. The speaker of the evening will be Dr. Alexander Silverman, Head of the Department of Chemistry of the University of Pittsburgh; his subject will be "Glass: Today and Tomorrow."

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Ask the Atlas Supply Co. of 4512 High St., Manayunk, Philadelphia, Pa., for information concerning their adhesives. They are useful in air conditioning, insulation and acoustical work, and many other applications can be found for them.*

ASBESTOS



TEXTILES

HOW BEST TO SERVE

RIGHT-THINKING CITIZENS ARE AWARE OF AN OBLIGATION TO "DO SOMETHING" IF AND WHEN "CALLED UPON" IN OUR NATION'S COMMITMENT TO RESIST AGGRESSION. THAT WILLING-TO-DO SPIRIT SEEMS AS WIDESPREAD IN THE UNITED STATES AS IS THE COMMON TENDENCY OF THE AVERAGE INDIVIDUAL TO WAIT FOR LEADERSHIP TO SET IN MOTION THE POWER OF CONCERTED EFFORT. LEADERSHIP AND CONCERTED EFFORT! LEADERSHIP RESTS IN THOSE WHO HEAD INDUSTRIAL ACTIVITY AS WELL AS IN THOSE WHO HOLD POLITICAL OFFICE OR COMMAND IN THE ARMY AND NAVY. MANUFACTURING IS CONCERTED EFFORT AND MANUFACTURING IS THE MEANS BY WHICH OUR NATIONAL INTENTIONS WILL BE ACCOMPLISHED. THEREFORE, THE INDIVIDUAL'S JOB IN ANY WORK WHICH PRODUCES GIVES THE OPPORTUNITY TO "DO SOMETHING" IN THE GREAT UNDERTAKING. HE SERVES BEST WHO DOES HIS BEST AT HIS DAILY TASK. INDUSTRIAL LEADERS RECOGNIZE THIS IN THE POLICY OF MANAGEMENT WHICH COMMENDS AND REWARDS CAREFUL WORKMANSHIP. CARE IN PERFORMANCE OF WORK PRODUCES SKILL. SKILLFUL WORKMEN MAKE SUPERIOR PRODUCTS. THE HIGH STANDARD OF R-M PRODUCTS IS EVIDENCE OF THIS POLICY. R-M PRODUCTS SATISFY THE CONSUMER.

RAYBESTOS-MANHATTAN, INC.
INDUSTRIAL SALES DIVISION

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The facilities of our sales and research organization are at the disposal of any manufacturer who has a problem to solve which involves the use of fabricated asbestos.



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